

How to Setup an Ubuntu Linux Server AMI

The Amazon Cloud free tier account already provides the opportunity to instantiate a Basic 32-bit Amazon Linux AMI 2011.09 machine, which is an Amazon customized version of a Linux Cent OS v5.x.

For simplicity, this tutorial will explain how to instantiate an Ubuntu Server v10.04 LTS (Long Term Service) which is one of the most popular Linux available.

1. - First we will browse to the following link:

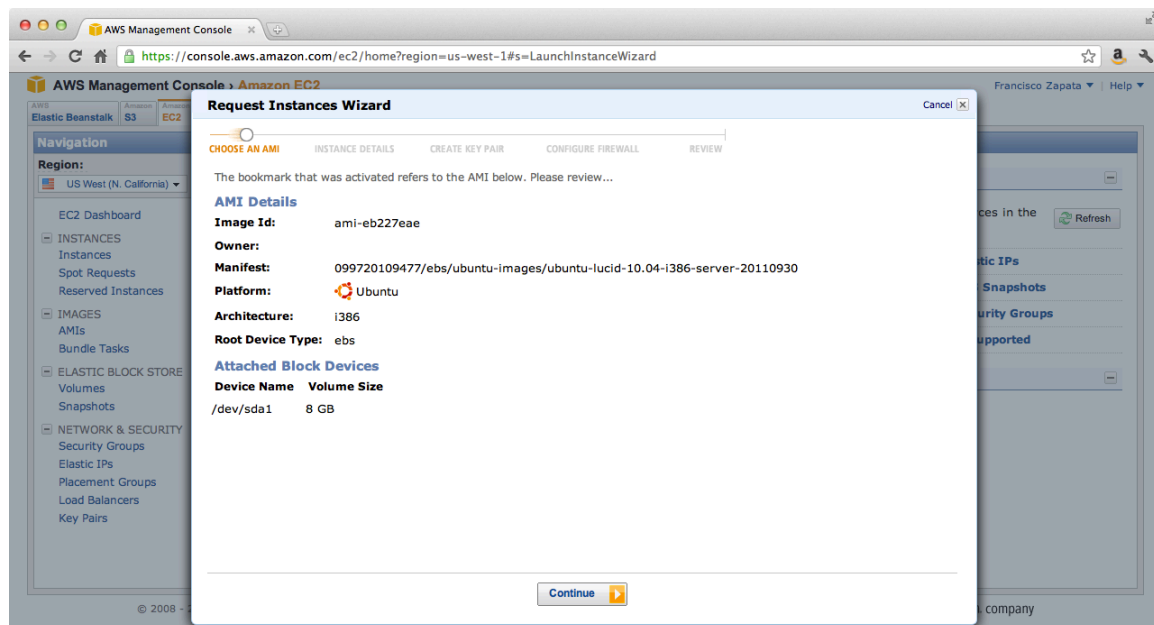
<http://cloud-images.ubuntu.com/releases/10.04/release/>

and then click in the following AMI instance:

```
ec2-run-instances ami-eb227eae --instance-type t1.micro --region us-west-1 --key  
${EC2_KEYPAIR_US_WEST_1}
```

Notice this is a micro instance and so with this AMI we will remain in the free tier.

2. -After making click in the link, the browser will take you to the Amazon Cloud and will ask you to login into Amazon Web Services (AWS). Once inside, the Request Instance Wizard will appear with the details of the image. Click in the “Continue” button.



3. - In the next screen the Wizard will show the instance details. Just use the default configuration and click the “Continue” button.

The screenshot shows the AWS Management Console with the 'Request Instances Wizard' open. The wizard is in the 'INSTANCE DETAILS' step, which is highlighted in the top navigation bar. The left sidebar shows the 'Navigation' menu with 'EC2' selected. The main content area displays the following information:

- Region:** US West (N. California)
- Number of Instances:** 1
- Instance Type:** Micro (t1.micro, 613 MB)
- Launch Instances:** This section is selected with a radio button. It includes a description: "EC2 Instances let you pay for compute capacity by the hour with no long term commitments. This transforms what are commonly large fixed costs into much smaller variable costs." Below this, the 'Launch into:' section shows 'EC2' selected and 'Availability Zone:' set to 'No Preference'.
- Request Spot Instances:** This option is not selected.

At the bottom of the wizard, there are buttons for '< Back' and 'Continue >'. The background shows the AWS console interface with the 'EC2 Dashboard' and various services like 'Elastic Beanstalk', 'S3', and 'IAM'.

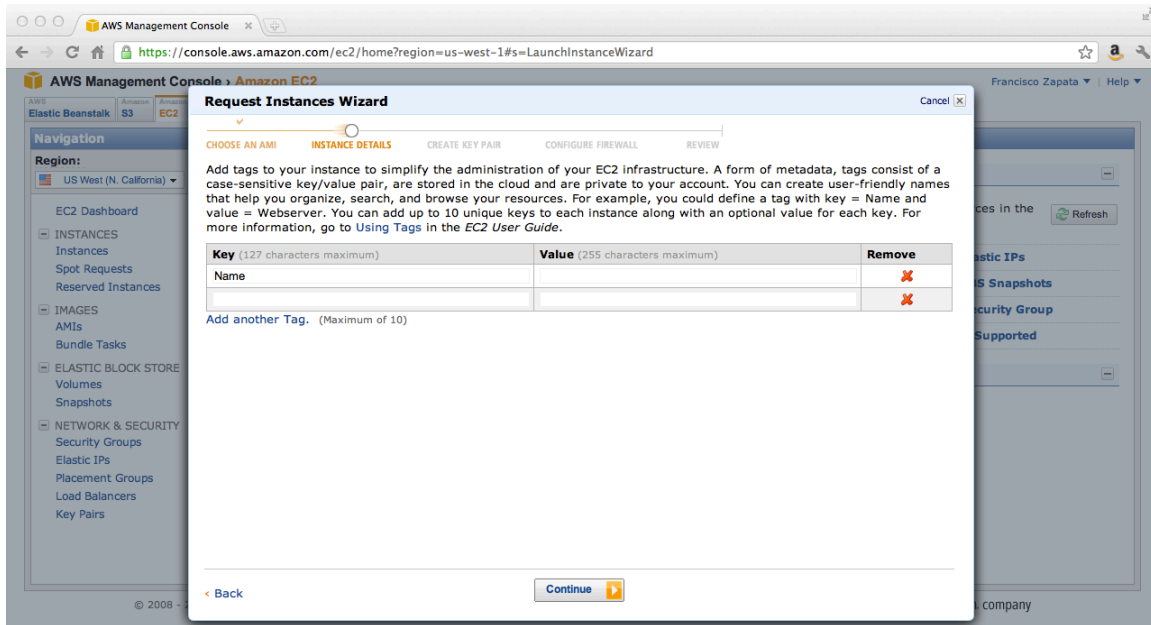
4. - Next, the Wizard will show the Advanced Instance Options. Just leave the default options again and click the “Continue” button.

The screenshot shows the AWS Management Console with the 'Request Instances Wizard' open, now in the 'Advanced Instance Options' step. The wizard is in the 'Advanced Instance Options' step, which is highlighted in the top navigation bar. The left sidebar shows the 'Navigation' menu with 'EC2' selected. The main content area displays the following information:

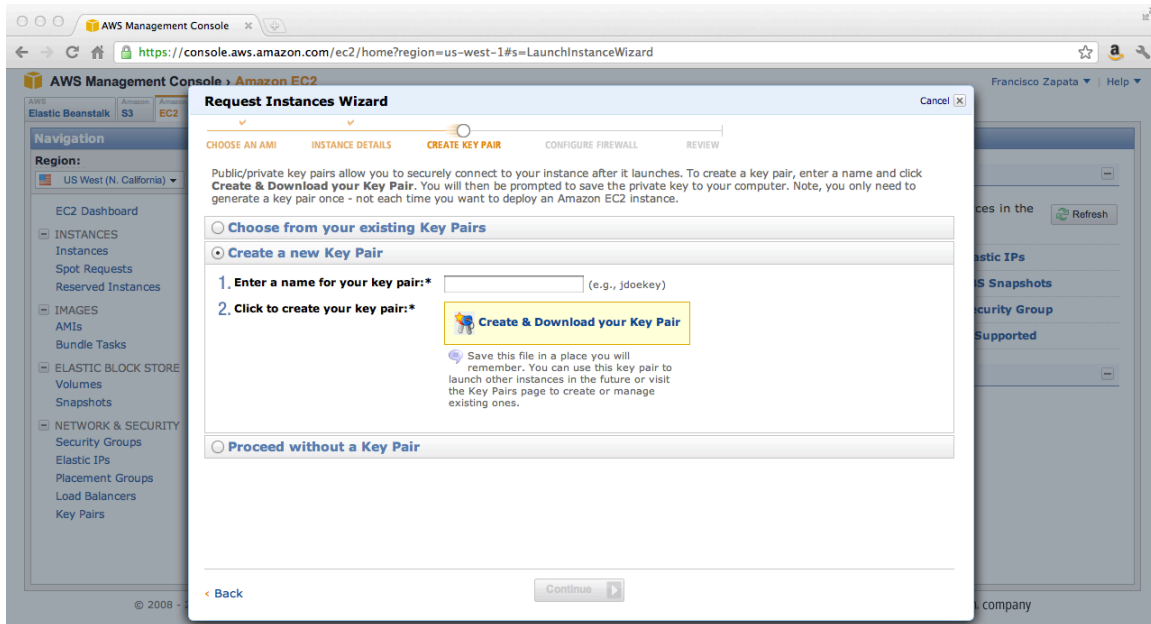
- Number of Instances:** 1
- Availability Zone:** No Preference
- Advanced Instance Options:** This section is selected with a radio button. It includes a description: "Here you can choose a specific kernel or RAM disk to use with your instances. You can also choose to enable CloudWatch Detailed Monitoring or enter data that will be available from your instances once they launch." Below this, the 'Kernel ID:' and 'RAM Disk ID:' sections both show 'Use Default' selected.
- Monitoring:** This section includes a checkbox for 'Enable CloudWatch detailed monitoring for this instance (additional charges will apply)', which is currently unchecked.
- User Data:** This section includes a text input field for 'as text' and a checkbox for 'as file', which is currently unchecked.
- Termination Protection:** This section includes a checkbox for 'Prevention against accidental termination', which is currently unchecked.
- Shutdown Behavior:** This section includes a dropdown menu set to 'Stop' and a description: "Choose the behavior when the instance is shutdown from within the instance."

At the bottom of the wizard, there are buttons for '< Back' and 'Continue >'. The background shows the AWS console interface with the 'EC2 Dashboard' and various services like 'Elastic Beanstalk', 'S3', and 'IAM'.

5. - In the next screen, you could add tags to your instance to simplify the administration. Lets leave this screen empty and click the “Continue” button.

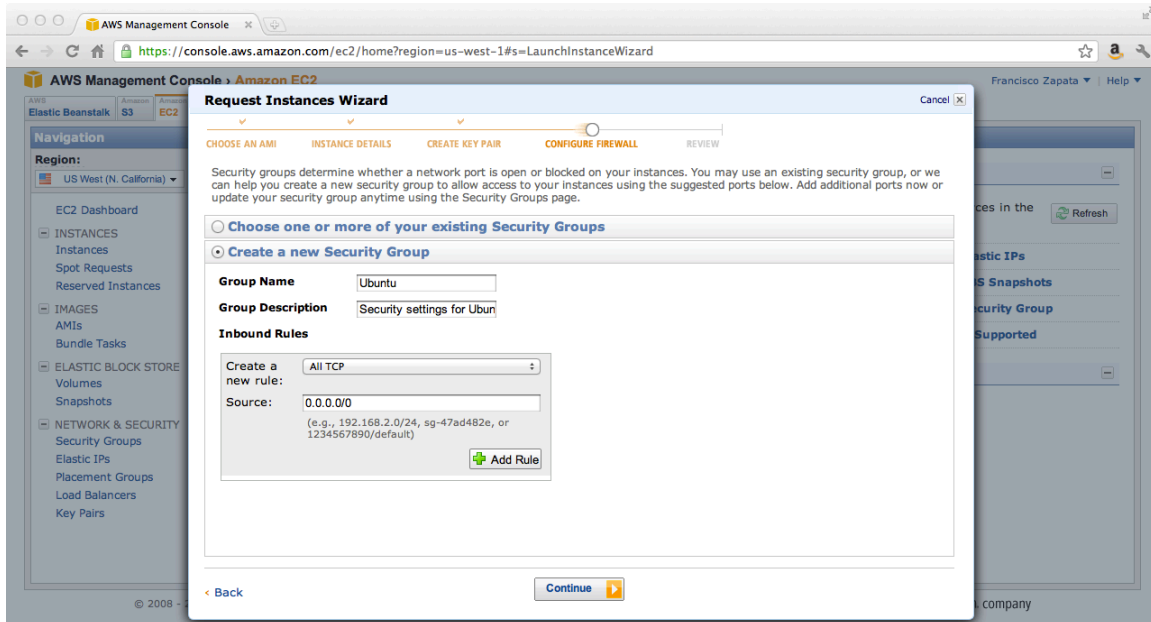


6. - Now the wizard takes you to the Create Key Pair screen:



We need to create a new key pair to securely access our server. Type in the description of the key pair your Miner ID (this way we can easily identify and access your server for lets say grading purposes). For example, mi UTEP email is: fazapatagonzalez@miners.utep.edu, so my Miner ID would just be: fazapatagonzalez. Click in the “Create & Download your Key Pair” link and save your new key pair in an easy to remember location. Then click the “Continue” button.

7. - We now need to configure the Amazon Cloud Firewall settings as follows:

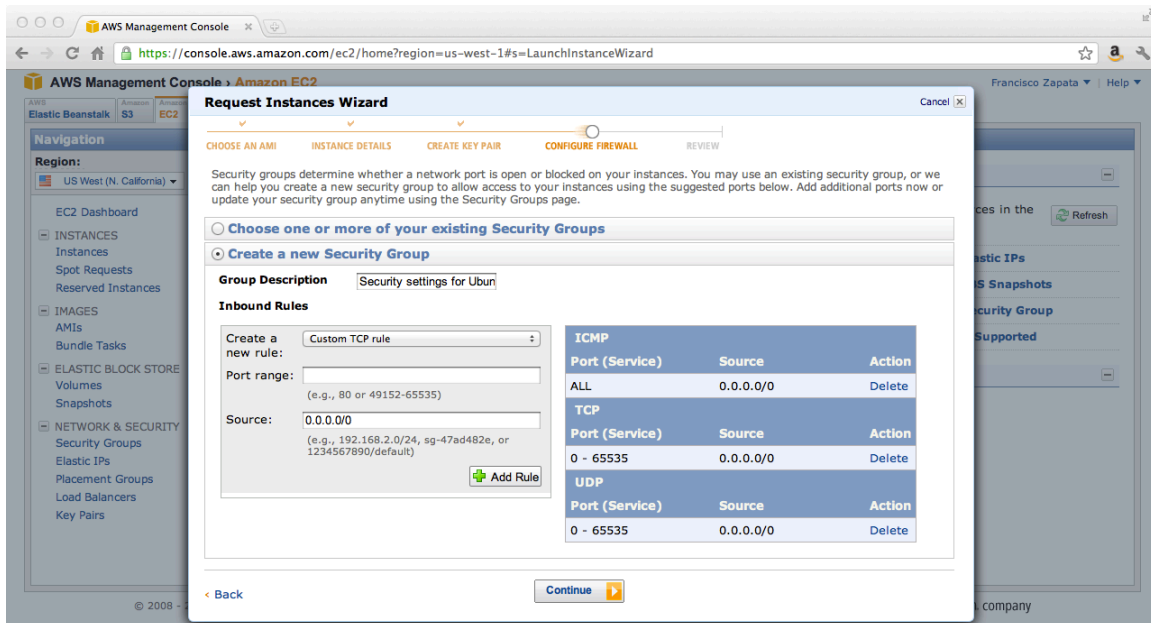


Type a new Group Name, for example: Ubuntu.

Also type a Group Description, for example: Security settings for Ubuntu Server

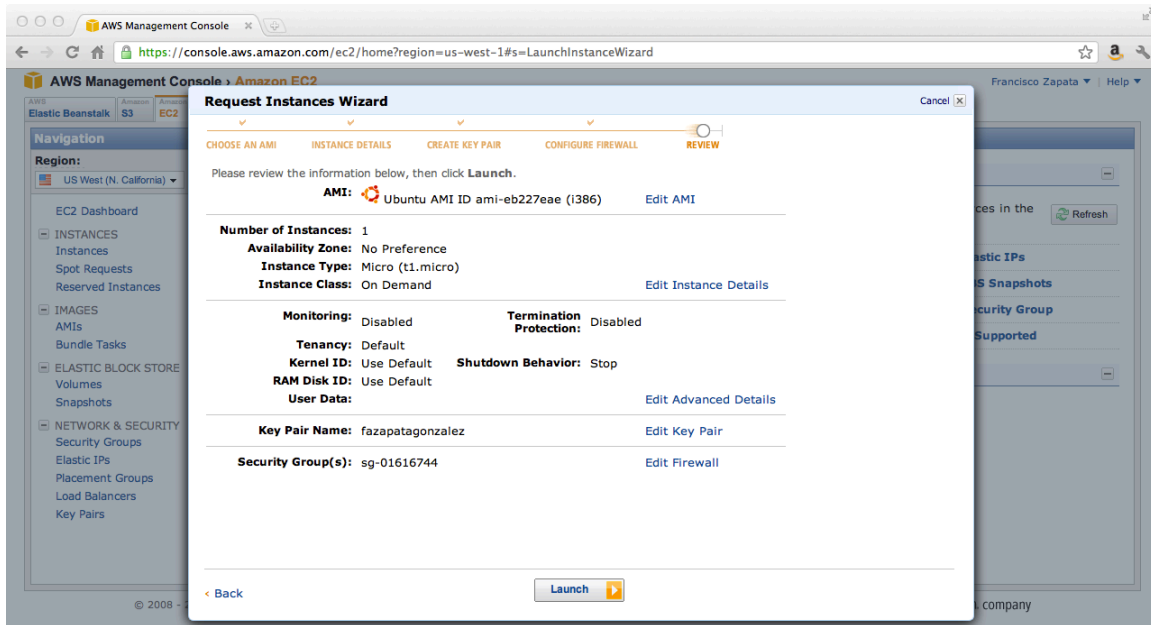
Create the three following rules: All TCP, All UDP and All ICMP. In the source type: 0.0.0.0/0 for every rule and click the “Add Rule” button every time.

Your settings should look like this:



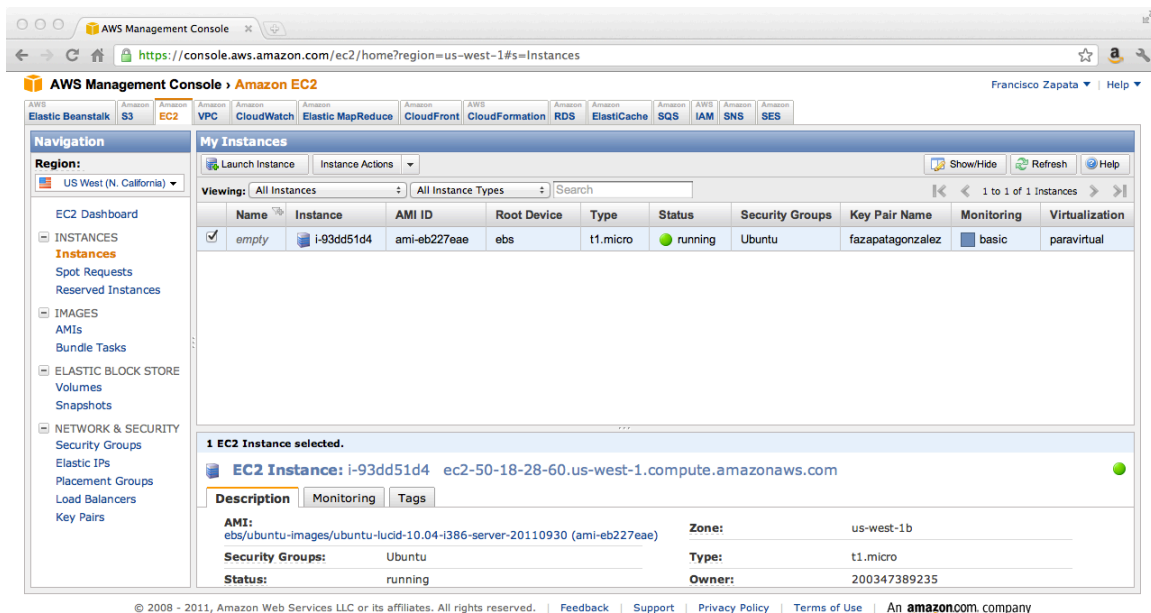
Now click in the “Continue” button.

8. - Now we are ready to launch your new Ubuntu Server Instance:



Click on the “Launch” button.

9. - You can check your running instances by clicking in the “Instances” choice of the left menu in the “EC2” tag:



10. – To access your server you run the ssh command using the ubuntu user:

```
ssh -i fazapatagonzalez.pem ubuntu@ec2-50-18-28-60.us-west-1.compute.amazonaws.com
```

If you need root privileges you can run the sudo command before the needed operation, for example:

```
sudo apt-get update
```

If you need to use the root user, type the following command:

```
sudo -i
```

And it will give you root access:

```
root@ip-10-167-11-18:~#
```